

WE CLAIM:

1. A computer system for defining a representation of a shader in graphical form, the system comprising:

5 a first collection of graphical objects, each object having at least one input and at least one output, each of the first graphical objects defining a graphical function;

10 a second collection of graphical objects, each object having at least one input and at least one output, each of the second graphical objects defining a graphical parameter;

a set of directed wires, a wire of the set coupling between at least one output of the second graphical object set and at least one input of the first graphical object set;

15 a code definer operative to express a wire coupling between a first and second graphical object, the code definer further operative to identify each graphical parameter and graphical function coupled by the wire; and

20 a compiler, operative to translate and compile code defined by the definer into a selected program language suitable for operating and controlling a hardware shader.

2. In a computer system, a method for defining a representation of a shader in graphical form, the method comprising:

25 defining first collection of graphical objects, each object having at least one input and at least one output,

each of the first graphical objects defining a graphical function;

defining second collection of graphical objects, each object having at least one input and at least one output,
5 each of the second graphical objects defining a graphical parameter;

coupling a directed wire between at least one output of the second graphical object set and at least one input of the first graphical object set;

10 expressing a wire coupling between a first and second graphical object in a representational software language;

expressing each graphical parameter and graphical function coupled by the wire in said representational language; and

15 translating and compiling the representational software language into a selected program language suitable for operating and controlling a hardware shader.